FINAL MEETING SUMMARY

HANFORD ADVISORY BOARD
RIVER AND PLATEAU COMMITTEE MEETING
April 13, 2005
Richland, WA

Topics in this Meeting Summary

This is only a summary of issues and actions in this meeting. It may not represent the fullness of ideas discussed or opinions given, and should not be used as a substitute for actual public involvement or public comment on any particular topic unless specifically identified as such.

Welcome and Introductions

Maynard Plahuta, River and Plateau committee vice-chair, welcomed the committee and introductions were made. Changes to the February meeting summary were made, and the summary was adopted.

Groundwater Well Decommissioning

John Morse, Department of Energy-Richland Operations Office (DOE-RL), briefed the committee on prioritization of well decommissioning and the status of funding for well commissioning. Well decommissioning is moving ahead, with 151 wells decommissioned to date. There are 70 Webster wells whose completion is pending the use of the jet-shot technique to collapse well casings. Work is currently being done to decommission 74 Webster wells, with the goal of 255 total wells decommissioned by the end of 2005.

Due to recent budget constraints, no wells are budgeted for decommissioning in 2006. However, this does not mean no decommissioning work will be done. If more funding is appropriated, well decommissioning is one of the first activities that will be undertaken. Well decommissioning is done by subcontractors, so work can be initiated quickly once funding is made available. DOE wants to make sure they meet milestones under the Tri-Party Agreement (TPA) and the Comprehensive Environmental Response, Completion,

and Liability Act (CERCLA) timeline to support remediation efforts. Fluor is working on a long-term decommissioning plan, with a draft presently being reviewed by DOE. There are a couple thousand actual wells on the Hanford site, but there also are several other types of holes that are being included in decommissioning plans.
Prioritization of wells for decommissioning identifies wells that pose the greatest risk (i.e. wells near waste sites, with poor construction, or with potential to contaminate groundwater), and then moves on to other wells that are evaluated based on their potential for future use. The current strategy is to decommission wells that pose a near-term threat to groundwater, and then get to wells with no known potential for future use. Since wells are expensive to put in, it is important to identify those wells that may still be of use for monitoring or other activities.

Regulator Perspectives

- Jane Hedges, Washington State Department of Ecology (Ecology), said well decommissioning is one of the key areas of Hanford cleanup that has dropped below budget levels. A plan has been developed to address well decommissioning. DOE has done a good job of communicating information with Ecology throughout the process. Ecology is looking at the toolbox of options for adding well decommissioning to Records of Decision (RODs) and into milestones. DOE has never argued that they have to decommission wells, but there is disagreement about the timeframe for decommissioning. Ecology will likely send official correspondence, and will be looking for increased funding for well decommissioning.

Committee Discussion

- *Are the wells associated with the Puget Power project captured in the decommissioning plan?* John said he believes they are accounted for, since all holes on the Hanford site have been inventoried. Decommissioning activities have concentrated on the Central Plateau, moving out from there. Energy Northwest has a number of test wells as well. DOE is currently in the process of discussing the decommissioning efforts with other groups in order to identify who owns what, and associated decommissioning responsibilities.
- *Have wells with potential risk of groundwater contamination been decommissioned?* Jane Borghese, Fluor, explained that Central Plateau wells were considered first, since those are the highest risk wells. Wells in close proximity to waste sites were evaluated next, focusing on their construction to determine if they are of higher or lower risk. Well evaluation is done using the database of wells and from field observations. Roughly 100 wells have been decommissioned per year.
- *If wells are truly a safety hazard, why are they not being decommissioned immediately as opposed to over the next five years?* John said there are no wells that constitute an immediate hazard right now. There are no open, seeping wells. John observed it would be useful for DOE to clarify this issue in the well decommissioning plan.
- *Vince Panesko said that the number of decommissioned wells reported in an Inspector General (IG) report were higher than other numbers he has seen. There is*

a budget allocation for decommissioning a specific number of wells, and those numbers were not as high as expected. Is the IG wrong? Why is there a discrepancy in the numbers being reported? John acknowledged there is a numbers problem, which he attributes to the multiple definitions of what is considered a well. Jane said the IG numbers refer to the accelerated cleanup plan, but since the accelerated plan cannot be accomplished due to inadequate funding, the number of wells to be decommissioned will be lower than projected. John said an accurate picture of completed work and plans for future well decommissioning work needs to be developed and presented. He will put this together for the committee. The draft well decommissioning plan should be done by the end of the year.

- *Two years ago, when the groundwater strategic plan was being put together, the commitment to well decommissioning was made, but DOE is now effectively backing away from that commitment due to budget cuts. Will this information be captured in the well decommissioning plan? Are activities not required by milestones going to continue? Since these activities are easy to cut from a budget perspective, the site manager has to fight for money to address these activities. There is a perception senior management is backing away from commitments made to complete cleanup work outside TPA milestone requirements.* John said activities have not been cut, but have instead moved out in time. He reiterated the need to demonstrate this clearly to the committee and others.
- *Since many wells were originally put in for monitoring groundwater, now that they are being decommissioned, how will groundwater contamination be monitored?* John explained that only wells that are no longer needed are being decommissioned.
- This work has stopped large volume discharges. More than 30 wells were rendered useless due to the groundwater level dropping below the bottom of wells. There is a plan to try a technique to deepen some wells. If deepening some wells works, these wells can be recovered and put to use (maybe half a dozen), which will save some money.
- What percentage of the $200 million budget decrease will taken from the well decommissioning program? John said the whole groundwater program is $70 million per year. He estimates 30-40% of the wells program will be cut. Committee members expressed concern that the Hanford Advisory Board (Board) is receiving conflicting reports about the impacts to the well decommissioning program.

Hanford Advisory Board Central Plateau Decision Guidance and Barrier Considerations

Penny provided the committee with a reconfigured flow chart for Central Plateau Decision Guidance and Barrier Considerations that was originally developed at the March Board meeting. The committee was tasked by the Board to look at this product and determine if it reflects what was agreed on in terms of Central Plateau Decision Guidance. The committee is charged with providing additional input on considerations for barrier application. The committee read over the new flow chart to ensure the

accuracy and evaluate additional big picture policy and technical issues relating to caps and barriers that should be considered for inclusion as part of the product.

Committee Discussion

- Several committee members felt the new flow chart layout is an excellent refinement of the original. The new flow provides a logical progression to and development of the Board's bias to Remove, Treat, and Dispose.

The committee reviewed the flow chart and made comments and suggestions for revisions.

- Committee members discussed some adjustments to the chart, and how the pathways were plotted. Additionally, the committee discussed the caps and barriers consideration box, specifically whether use of caps should be permanent, temporary, or interim. The life expectancy of barrier performance was considered, as was when and what could trigger a return to the beginning of the flow chart.
- The committee discussed the content for the additional component of the flow chart that will address barrier specifics, considerations, and other policy and technology issues that should be included in the decision-making process. Several main policy statements emerged from the discussion:
    - There should be standard Hanford site barrier criteria and performance requirements.
    - Consider barrier interactions with the ecosystem management of the Hanford Reach and the site.
    - Discuss the responsibility, authority, and availability for monitoring long-term stewardship budgets (include LTS, institutional control costs, cost trade-offs in decision-making, and cost of failure). Add the Board's principles on long-term stewardship into the top of flowchart as the fourth Board bias. Susan Leckband will work on this.
    - Discuss risk.
    - Decisions on barriers should be made in consultation with the Tri-Party Agencies.
    - Policy: After a cap is placed, ongoing review should include failures, monitoring, budget, new technologies, EPA 5-year reviews, and ownership responsibilities.
    - Policy: The federal government should maintain responsibility for capped sites – cost, monitoring, etc.
    - Policy: There should be a public process associated with ongoing reviews.
    - There should be technology development drivers and requirements.
    - Make sure models are correct and have had independent expert technical review (e.g. mass diffusion).

- Rob Davis and Gary Peterson will work on the list of policy considerations to be used when considering caps and barriers. Their draft will be distributed to the full committee for review.

Transuranic (TRU) Waste Retrieval at Idaho National Laboratory

Nick Ceto, EPA, briefed the committee on recent developments regarding the retrieval of TRU waste at Idaho National Laboratory in Idaho Falls, ID as a comparative example for TRU cleanup at Hanford. The committee viewed a video produced by Bechtel National, Inc. on cleanup at Idaho National Laboratory. Some important differences between Hanford and Idaho National Laboratory are that the footprint of the contaminated site at the Idaho site is smaller than at Hanford, and Idaho National Laboratory plans to continue activities associated with nuclear energy.

Bechtel National, Inc. used innovative technologies in cleanup activities of waste sites and to protect workers (e.g. glovebox excavator method facility and the accelerated retrieval project). Not all waste material is sampled for characterization. Most of the TRU identification is done through training workers to recognize TRU waste by visual observation. So far, workers have been able to locate waste materials pretty well from shipment documentation records.

Looking at waste removal activities at Idaho National Laboratory provides a comparative example of what is being done elsewhere in the DOE complex, the range of technical issues, costs, etc.

Committee Discussion

- *The information on Idaho National Laboratory leaves the impression that not all the waste was retrieved?* That is correct, but Nick said that one has to understand the history of the site. Initially no removal was going to be done. Some material that was determined not to pose a risk has been left in place.
- Idaho National Laboratory is a good example of how to put removal facilities over waste sites for waste removal activities.
- *Were there any surprises during removal work?* Nick said the drums containing waste were in better shape than anticipated. Removal workers are doing well with waste visualization and finding what they are looking for. They plan to go through an additional sampling process to try and make sure they are not missing any waste.
- *What happened if a piece of waste was identified as high risk, but was too large to be processed through the removal facility?* Nick said he was not sure, and that waste removal is still an in-progress activity. These potential issues will be dealt with if and when they arise.
- *What is the relationship between EPA and the State of Idaho regarding the Idaho National Laboratory?* Nick said there is a similar regulatory framework to that at Hanford (i.e. the Resource Conservation and Recovery Act (RCRA) and CERCLA.

The State is the lead on the project, with EPA as a partner, and DOE answers to both agencies. This is similar to the structure established by the Tri-Party Agreement.

- *Is there a likelihood of employing some of these technologies at Hanford?* Yes.

Integrated Disposal Facility (IDF)

Delmar Noyes, Department of Energy-Office of River Protection (DOE-ORP), updated the committee on the hazardous waste permit and the Washington State Environmental Policy Act (SEPA) decision for IDF.

DOE is working productively with Ecology to determine the appropriate path forward in the permit process. The permit has been modified to focus only on vitrified low activity waste from the Waste Treatment Plant and the Demonstration Bulk Vitrification system. Preparatory work is scheduled to resume on Monday, April 18, 2005. Ecology has approval for preparatory work. The next steps will be to focus on permit writing. The final RCRA Permit is to be issued in July 2005. Construction is scheduled for completion in 2006.

Regulator Perspectives

- Suzanne Dahl, Ecology, said the modified permit came from conversations Ecology had with ORP and the Board committees. These conversations helped foster a path forward through the SEPA coverage concerns. Suzanne and Ecology appreciated the help from the Board. The agreed upon permit will only be for the first portion of the facility. This will provide time to work out SEPA and National Environmental Policy Act (NEPA) issues.

Committee Discussion

- *Pam said she is surprised clay is being used as part of the barrier layer for IDF. What about documented performance issues with clay?* Suzanne explained that clay is the bottom layer of the barrier. On top of the clay layer are geo-engineered membrane liners and leachate collection systems. There are three layers of geo-engineered membrane layers before the clay layer. It is the standard way of disposing of waste material. Craig Cameron, EPA, said that clay liners are okay, and are not the part of the barriers that tend to fail. Clay caps are the problem.

- *Regarding the failure of a clay layer at the Arlington landfill in Oregon, Shelley asked if there were any more specifics and whether that failure has been examined in terms of evaluating liners for waste disposal facilities at Hanford?* Suzanne said that event has been looked at, and there is quite a bit of conjecture about the nature of the failures. However, there are some design approaches that provide good information for Hanford waste disposal facilities.

- The permit will come back to the committee sometime between the end of April and the end of May.

Board Advice #168, U Plant Proposed Plan

Kevin Leary, DOE-RL, introduced Frank Roddy as his replacement on the Canyon Disposition Initiative (CDI) project. Kevin will retain his responsibilities with waste sites and barriers.

Kevin updated the committee on the 221-U Facility Proposed Plan. DOE is still considering the option to import waste into the structure. Public comment on the CERCLA Proposed Plan closed on January 31, 2005. DOE received a lot of comments (86 from the Board, the State of Oregon, the Confederate Tribes of the Umatilla Indian Reservation (CTUIR), the Nez Perce Indian tribe, and five individuals). All the comments were categorized and DOE is still in the process of responding. Due to the number and detail of the comments, DOE is unable to respond to Board advice at this time. Doing so would have shown preferential treatment, so all comments will be released at one time. The Board's advice (comment #168) was categorized as a public comment.

DOE plans to meet with other TPA agencies to go over comment responses. DOE plans to issue the ROD in July of 2005. The response to Board advice (as part of the ROD document) should be done between April and May of 2005.

Committee Discussion

- *The proposed plan shows that the 221-U Facility structure is going to be demolished to the canyon deck level. Has DOE given up on storing waste in the canyons? Kevin said DOE would consider storing waste material in the canyons as long as appropriate and acceptable waste streams are identified.*

- *Has DOE responded to the IG report on the CDI?* Kevin said DOE has responded to the IG report and as a result they have reevaluated costs. However, the IG report did not take into consideration the total lifecycle costs of waste. DOE has done additional modeling to determine what is the highest-level waste that can be put in canyons. Craig Cameron said initially canyon disposal was marketed as a money saving project. DOE discovered disposal would be more difficult than expected, so the anticipated savings evaporated.

- *What are possible waste streams that could go in the canyons?* Kevin indicated that DOE would have to look for some special waste. Immobilized low activity waste (ILAW) was considered. He said they could also consider bulk-soil waste, and mix it with grout to make soil cement. Craig said cesium and strontium were originally considered, but were determined to be unfeasible. The heat generated from this waste would have compromised storage in the canyons.

- Kevin stated that DOE would continue to hold lessons-learned workshops with other waste sites. They will continue to look for waste streams that can be disposed of in the canyons. If a waste stream is identified, the facility will not be demolished to canyon deck level in order to accommodate waste.

- *Is it correct to say, from a budget perspective, that work is on hold?* Kevin said that it is correct to say work is on hold due to budget shortfalls, but there are currently some discussions about possible work that could be done.

Site Specific Advisory Board Product

Todd updated the committee on the Site Specific Advisory Board chair's (SSAB) proposal for a national forum. There are multiple disposition factors that are causing havoc throughout the DOE complex. The SSAB chairs still have not received a formal response to the letter they sent to DOE, but have received several informal responses that indicate people think it is a good idea. The SSAB chairs put together a forum proposal, based on a previous letter and input from other chairs. Committee members were asked to review this draft document. If committee members have issues with the content of the letter, they should let Todd, Susan Leckband, or Shelley Cimon know. Todd hopes all chairs will sign-on to the product. He indicated that he does not think it is likely this will happen since it is generally difficult to get consensus from the SSAB chairs.

Committee Discussion

- Paul Golan, DOE-Headquarters (DOE-HQ), said he was appreciative of the letter, and thought it might be good to have a working group approach.

- Todd said a working group on the forum cannot be too big or it risks not being useful. The number needs to stay under 100. He was not sure how much specificity the chairs should get into. There has been discussion about what role the chairs should play in the national forum, whether as sponsors, directors, or some other capacity.

- Susan Leckband told the committee there are three issues Susan and Shelley are taking to the SSAB meeting aside from the proposal: 1) Potential impact from budget cuts, 2) Strategic decision-making, and 3) What to do with pre1970 TRU waste?

300 Area Workshop

Shelley updated the committee on the planning for the 300 Area End States Workshop. She said the workshop is being based on the understanding that DOE is committed to cleaning up the area to industrial level. In advance of the workshop, DOE is now saying they are not willing to revisit the idea of cleaning up to a level higher than industrial, despite the results of a recent study on reindustrialization of the 300 Area done by the City of Richland. This study showed there is little interest for industrial development on this space, especially a space with the history of the 300 Area.

Board members agreed to go into all of the end states workshops in good faith that there would be an open discussion about options. Shelley expressed concern that DOE's approach is unfairly bounding the workshop, since they are not willing to discuss a different cleanup level.

Committee Discussion

- *If the area cannot be reindustrialized, what is going to happen to the piece of land?* Shelley commented that this issue needs to be on the table and should be part of the workshop discussion. The Board may need to weigh in on this issue at the Yakima meeting.

- Maynard said of most concern is that the whole 300 Area is being cleaned up to industrial levels. It may be appropriate for some sections, but there are other sections that should be considered for a different cleanup level. He suggested someone should mention this to Shirley Olinger, DOE-ORP, before she gives her statement to the Board in Yakima.

- The committee discussed preparing a letter for the Board on the issue or adding it as an agenda item for discussion at the Board meeting. Shelley indicated there might also be other options before the Board meeting in Yakima, since the focus of the workshop is not finalized.

- Regardless of the Board responding to the issue, individuals can express concerns about changing workshop content. Shelley reminded committee member that when individuals agreed to participate in the workshops, they agreed they would not be speaking for the Board.

- Todd thought a letter might give more weight to individuals' comments. Although the Board is not sponsoring the workshops, the Board did write a letter agreeing to participate in the workshops. Gariann Gelston agreed a letter to show unity from the Board is important, especially since the point of the workshop is to get public buy-in.

- Harold commented that considerations of future land use are inherently municipal concerns. If the Board issued a letter, it should be with consideration and consultation of local constituencies. Several committee members suggested that all a letter would say is there should be a public involvement process, and the workshop discussion should not be limited. A letter should also explain the 300 Area covers a large area, not just the area by the 300 Area fence that most people see. Todd advised a letter should not say anything about the City of Richland study, so it would not be construed as taking a position on the industrial cleanup level.

- Maynard and Gariann will draft text for the letter. The committee will review the letter for committee consensus, before bringing it to the Board.

Committee Business

- Shelley provided an update on Interagency Management Team (IAMIT) meetings. A meeting of the Waste Management committee is scheduled for 8:00am on Wednesday, April 20 at Ecology's Richland office.

- The committee discussed having a site tour. Generally, most committee members preferred identifying specific issues the tour could support, rather than a tour of the entire site. The committee discussed possible priority topics to focus on (e.g. caps – to visualize sites; the Environmental Restoration Disposal Facility [ERDF] – to understand moving waste from a particular site to ERDF). The committee decided to table the idea of a tour until more topics come up.

- The ERDF ROD release date is not yet available, so it will be kept on the watch list.

- The committee decided a committee call was not necessary.

- The committee decided to request a May meeting, tentatively scheduled for Wednesday, May 11. If the U Plant ROD is out by May, the committee should plan to review it. The response is part of the ROD, so it will only be sent to the committee if the ROD is finished.

Handouts

- Hanford Advisory Board – Central Plateau Remedial Action Values Flow, 4/13/2005.
- Big Picture Questions on Caps / Barriers for River and Plateau Committee, 1/12/2005.
- Integrated Disposal Facility, Delmar Noyes, DOE-ORP, 4/12/2005.
- 221-U Clean Up: A Presentation to the Hanford Advisory Board River and Plateau Committee, Tri-Party Agencies, 4/13/2005.
- Questions for the Chairs Discussion, 4/13/2005.
- 300-Area End States Questions, 4/13/2005.
- 2005 Meetings and Public Comment Periods Timeline, 4/13/2005.

Attendees

HAB Members and Alternates

Allyn Boldt	Susan Leckband	David Rowland
Shelley Cimon	Vince Panesko	John Stanfill
Rob Davis	Jerry Peltier	Tom Stoops
Harold Heacock	Gary Peterson	Dave Watrous
Rick Jansons	Maynard Plahuta	Steve White
Pam Larsen	Wade Riggsbee	Gariann Gelston

Others

Steve Chalk, DOE-RL	Rick Bond, Ecology	Penny Mabie, EnviroIssues
John Morse, DOE-RL	Laura Cusack, Ecology	Jason Mulvihill-Kuntz, EnviroIssues
Kevin Leary, DOE-RL	Suzanne Dahl, Ecology	Jane Borghese, FH
Frank Roddy, DOE-RL	Jane Hedges, Ecology	Lanny Dusek, FH
	John Price, Ecology	Barbara Wise, FH
Delmar Noyes, DOE-ORP		Sharon Braswell, Nuvotec/ORP
	Craig Cameron, EPA	Dick Jaquish, WDOH
	Nick Ceto, EPA	